

## CHANNEL SAMPLING & 3D INVERSION SUPPORT SCALE POTENTIAL AT OLSERUM NORTH

Ragnar Metals Limited (“Ragnar” or “the Company”, ASX: RAG) is pleased to announce assay results for the surface channel sampling program at its Flaken prospect as well as a 3D Magnetic Inversion at its Olserum North Heavy Rare Earth Project in Southern Sweden.

### HIGHLIGHTS

- **6.3m** mineralised outcrop exposure with **up to 10,198 ppm (1.0%) total rare earth oxide (TREO) over 0.38m** within average grade of **4,824 ppm TREO (33%) heavy rare earth oxide (HREO)** in surface channel T2.
- **9.3m** outcrop exposure with up to **0.65m at 11,384 ppm (1.1%) TREO** within average grade of **4,063 ppm TREO (21% HREO)** in surface channel T1.
- **1.35m** outcrop exposure at **11,845 ppm (1.2%) TREO (35% HREO)** in surface channel T5.
- All channel composites of partially exposed mineralised bedrock remain open and untested.
- A 3D inversion of the recent detailed magnetic data indicates good continuity over 1km between the **Hylleled** and **Flaken** HREO prospects and a modelled depth from surface down to maximum 600m depth, suggesting good volume and depth potential.
- The survey identified at least three exciting untested magnetic targets, the largest of which extends from near-surface to a maximum depth of 1400m.

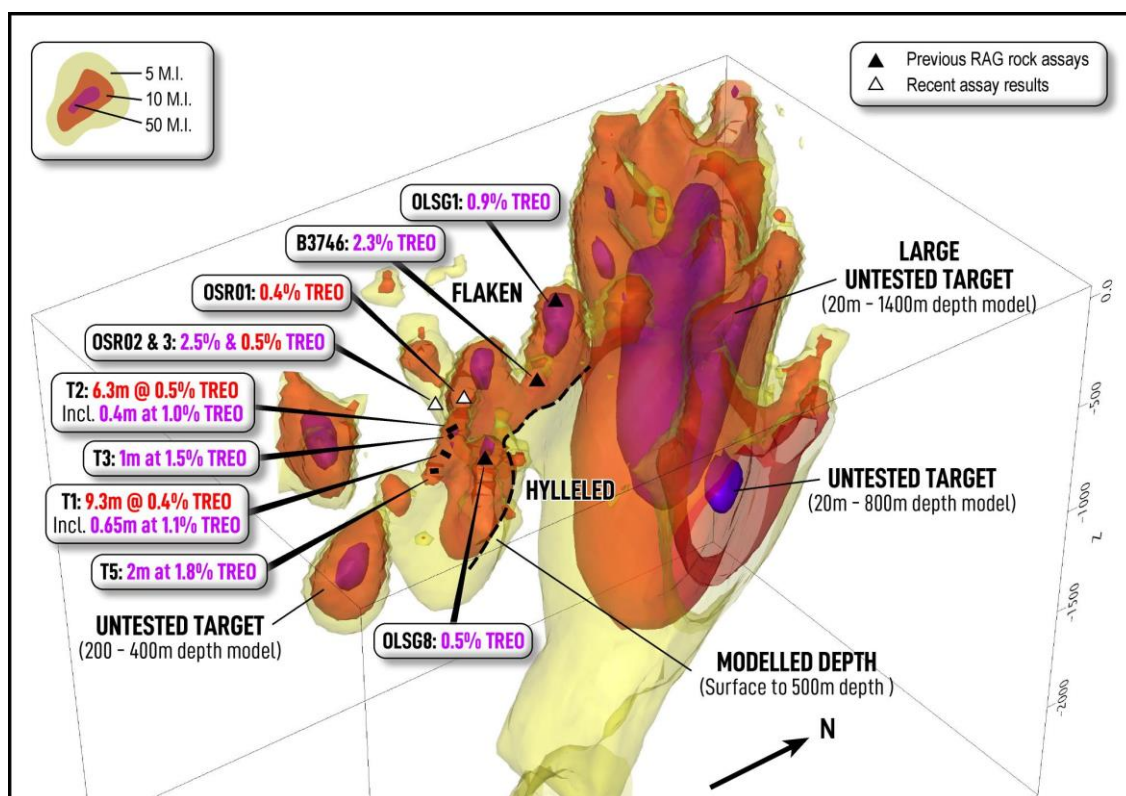


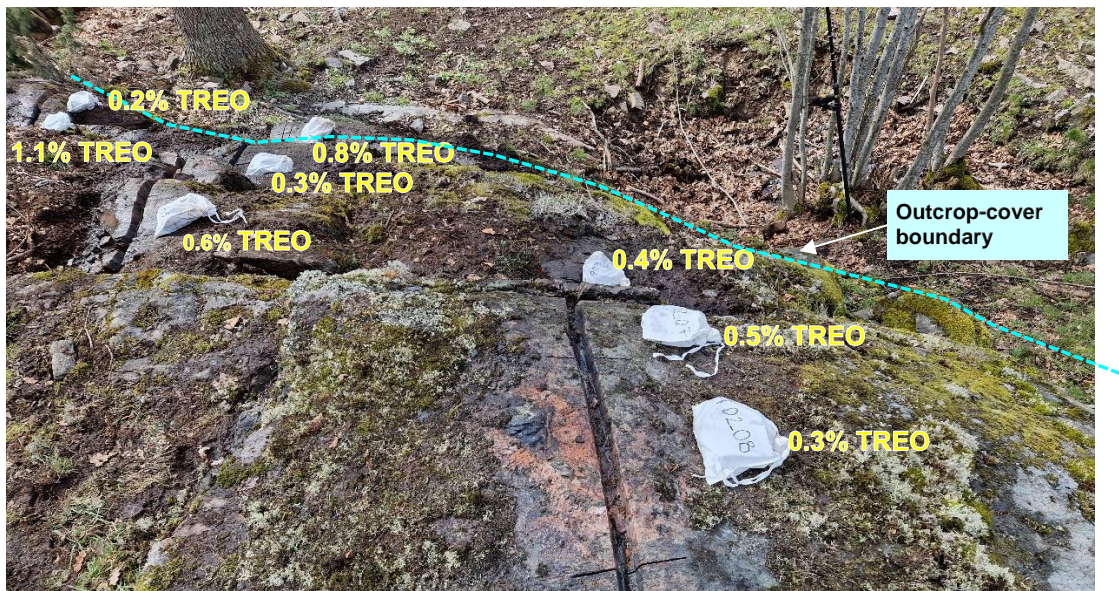
Figure 1: 3D Image looking northwest and down of the 3D inversion at Olserum North Project showing new channel and rock assay results as well as the new targets. (NB: TREO includes Sc and Y, M.I. is the magnetic susceptibility index on the 3D inversion model)

**Executive Director Eddie King commented:**

"These channel samples support the potential for significant widths for the high value heavy rare earth mineralisation. More importantly, the 3D inversion supports good continuity and significant depth potential, further confirming the scale potential of the project. We look forward to the next phase of exploration work at Olserum North this summer."

**Channel & Rock Sampling at the Olserum North HREO Project**

In April 2024, the company obtained permits and proceeded to conduct channel sampling at the **Flaken** prospect, utilising a diamond saw to sample known exposed outcrops with significant high-value heavy rare earth oxide (HREO) mineralisation identified in previous rock sampling programs (Refer to ASX:RAG announcements dated 16 May 2024 and 13 July 2023). The purpose of this program is to determine if the various magnetite- and biotite-related HREO mineralisation styles occur in significant widths necessary for deposit tonnages. A total of 29 channel samples and 8 additional rock samples along the strike were collected.



**Figure 2: Photo looking southwest of diamond saw cut channel sampling at T2 at Flaken prospect indicating TREO assay results.** (Note channels are constrained to areas of exposed outcrop only. Bedrock to the southwest of blue dash line are concealed under soil cover)

The channel sampling work produced highly encouraging results. Channel sampling results at **Flaken** include:

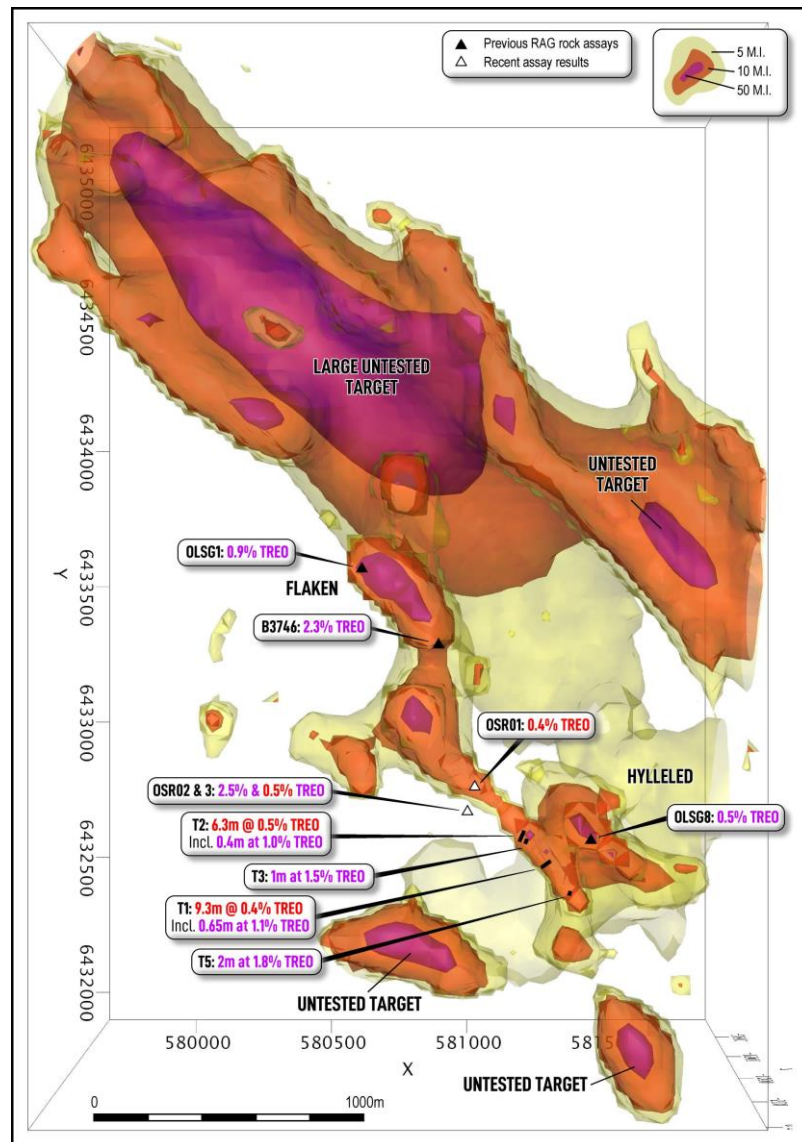
- **6.3m** wide mineralised outcrop exposure with up to **10,198 ppm (1.0%) TREO over 0.38m** within an overall average grade of **4,824 ppm TREO (33% HREO)** in surface channel T2;
- **9.3m** wide mineralised outcrop exposure with up to **11,384 ppm (1.1%) TREO over 0.65m** within overall average grade of **4,063 ppm TREO (21% HREO)** in surface channel T1;
- **1.35m** outcrop exposure at **11,845 ppm (1.2%) TREO (35% HREO)** in surface channel T5;
- **1.05m** outcrop exposure at **12,420 ppm (1.5%) TREO (20% HREO)** in surface channel T3.

It is important to note that all channel samples are taken on exposed rock outcrops only since earthworks were not available to expose further outcrops undercover (Figure 2). As a result, all the channel sampling composite assay intervals are open at both ends of each channel where mineralisation extends under cover (Figure 2). This indicates widths could be much wider.

In addition to the channel sampling work, some rock samples were taken along strike northwest of **Flaken** where several significant results were returned. Highlight results of this work are related to a



newly identified outcrop exposure located 200m northwest along strike from Flaken with up to **24,813 ppm (2.5%) TREO** in OSR02, **4,945 ppm TREO** in OSR03 and **3,940 ppm TREO** in OSR01 (Figure 1 and 3). It is interesting to note that samples OSR01 & 2 are not associated with strongly magnetic zones, indicating further biotite-dominated and magnetite-poor HREO mineralisation is likely to occur throughout the area in magnetically lower areas.



**Figure 3: Map view image of the 3D magnetic inversion isosurfaces at the Olserum North Project showing new channel and rock assay results as well as the new targets.** (NB: TREO includes Sc and Y, M.I. is the magnetic susceptibility index on the 3D inversion model)

### 3D Magnetic Inversion Review

A drone-assisted detailed magnetic survey was conducted earlier this year (See ASX:RAG announcement 20 March 2024). Experienced geophysics consultants at Resource Potentials were engaged to conduct a 3D magnetic inversion on the area immediately surrounding the extensive HREO mineralisation at the **Flaken** and **Hylleled** Prospects. Given the association of HREO mineralisation with variable magnetite-biotite alteration content, the inversion aims to map and 3D model the morphology of magnetite alteration and potentially associated HREO at depth and along strike from the known HREO occurrences at **Hylleled** and **Flaken**.

The results of this work are highly compelling, with several important observations having been made from the review of the 3D inversion:

1. The HREO mineralisation that was recently delineated by channel sampling at **Flaken** matches very well with the 0.010 magnetic susceptibility (S.I.) units isosurface (Figures 1 & 3). Various rock sampling to the north of **Flaken** with assays up to **2.4% TREO** (B3746) and also previous sampling at **Hylleled** up to **0.9% TREO** (OLSG1) match with the 0.010 S.I. isosurface containing additional isolated zones of higher magnetic susceptibility and indicate continuity over at least 1km strike.
2. Importantly, the 0.010 S.I. isosurface is modelled from surface down to a depth of between 400 and 500 metres, indicating significant depth potential of the HREO trend between **Flaken** and **Hylleled** (Figure 1). At **Flaken**, there are clearly 2 parallel zones, with the northern zone showing better depth extent to magnetite-dominated alteration and mineralisation.
3. An extensive and strong magnetic anomaly that extends for 2km by 600m occurs to the north of **Hylleled** prospect with a very deep extent to the 0.010 S.I. isosurface model from 20m depth down to a maximum depth of 1400m (Figure 1). This target represents the additional potential for a much larger target that needs to be appropriately assessed by Ragnar.
4. This work has identified at least 3 other strongly magnetic untested targets with good depth extent from near surface down to 400m to 800m depth which have never been properly evaluated by Ragnar and further work is warranted (Figure 1).

### Conclusions and Ongoing Work Programs

The channel sampling work results are highly encouraging and now provide increasing support for significant widths of high-value heavy rare earth mineralisation, with good continuity along strike over several hundred metres at **Flaken** (Figure 3). Due to poor exposure of outcrops and the possibility of stacked and/or much thicker zones of magnetite-and/or biotite-dominated HREO mineralisation are likely to occur undercover. Drilling is now required to properly evaluate the potential to establish thick widths and continuity with the primary future aim to delineate a HREO deposit. Permits for drilling have been submitted and are pending.

The 3D modelling work has successfully provided further context to the recent channel and rock sampling work. The 3D modelling indicates good continuity between **Flaken** and **Hylleled** and a depth extent of HREO mineralisation from surface down to maximum depth of 500m. These observations strongly support the potential for the future discovery of a HREO deposit in the area. Furthermore, the modelling has identified several excellent new targets for HREO, including a very large magnetic isosurface to the north of **Hylleled** and two others to the south. More fieldwork is required in close proximity to these newly identified targets to assess for drill permitting and testing.

### About the Olserum North HREE Project and Olserum Deposit

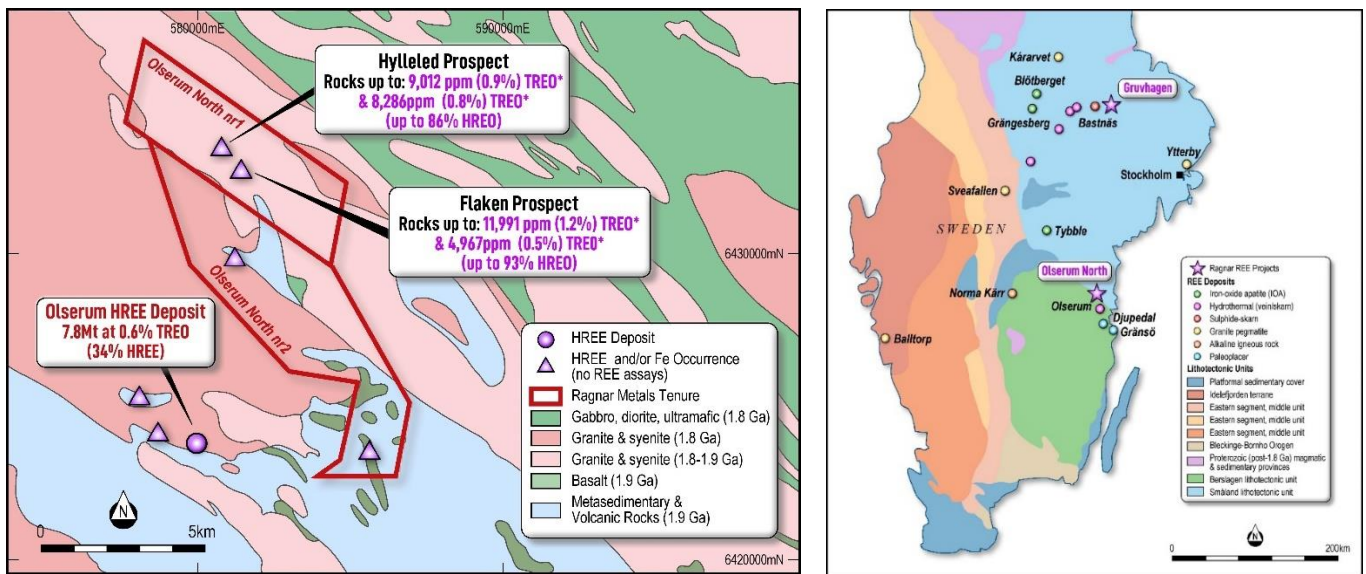
Olserum North comprises 20.8km<sup>2</sup> strategically located 8.5km north of the Olserum HREE deposit **7.8Mt at 0.6% TREO with 34% HREO**<sup>1</sup>, which is in an identical geological setting characterised by the same host Palaeoproterozoic Svekokarelian metasedimentary rocks (1.9Ga) and Palaeoproterozoic alkalic granite and syenite rocks (1.8Ga) mapped by the Geological Survey of Sweden (Figure 4).

The Olserum HREE deposit is hosted in hydrothermally altered metasedimentary and alkalic granites. Sweden has recently defined the Olserum REE deposit and the surrounding area as a resource of national importance for critical minerals<sup>2</sup>. The Olserum deposit and resource are characterised by variably magnetite-biotite-altered rock, often with spectacular coarse crystals of REE-bearing xenotime minerals<sup>3</sup>(Figure 5). The mineralisation style identified on Ragnar's 100%-owned Olserum North resembles the Olserum deposit.



What is most attractive about these deposits is the high percentage of heavy rare earth elements (HREE), in particular, the **Tb** (Terbium) and **Dy** (Dysprosium), as well as **Nd** (Neodymium). Among other essential uses, these metals are critical components in manufacturing performance technology solutions for clean energy. Rare earth elements (REE) are gaining prominence in the global economy due to their diverse applications, ranging from advanced electronics to permanent magnets in electric motors. For instance, a neodymium magnet utilised in wind turbines or electric vehicle motors boasts a strength 18 times greater than that of a conventional ferrite magnet, markedly enhancing energy efficiency.

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



**Figure 4 (Left): Interpreted bedrock geology map showing Ragnar's acquired Olserum North project in relation to the Olserum HREE deposit. (Right): A simplified geological map of the Southwest Fennoscandian Shield shows the location of Ragnar's REE Projects in relation to the Olserum REE deposit.**



**Figure 5: Photograph of biotite-magnetite veins (black) with local concentrations of coarse xenotime (red-brown) and apatite (dull white).**

**Table 1: Channel Sampling composite assay results (NB: TREO included Y and Sc)**

Channel #	From	To	Interval	TREO ppm	HREO%	cut-off TREO	Notes
T01	0	9.3	9.3	4,063	22%	2000 ppm	0.8% TREO open to the SW, 0.2% TREO open to the NE undercover
including	0	7.7	7.7	4,493	21%	3000 ppm	
including	4.4	7.7	3.3	6,118	24%	5000 ppm	
including	4.4	5.05	0.65	11,384	14%	1%	
T02	0	7.5	7.5	4,343	31%	2000 ppm	0.2% TREO open to the SW and NE undercover
including	0.53	6.8	6.27	4,824	33%	3000 ppm	
including	0.91	4.67	3.76	5,842	35%	5000 ppm	
including	0.58	0.96	0.38	10,198	30%	1%	
T03	0	1.05	1.05	15,420	20%	1%	1% TREO open to the SW and NE undercover
T04	0	1.86	1.86	1,850	34%	1000 ppm	
T05	0	1.35	1.35	12,094	35%	1%	1% TREO open to the SW and NE undercover
T06	0	1	1	4,121	26%	3000 ppm	0.4% TREO open to the SW and NE undercover

**Table 2: Channel sampling coordinates**

Channel #	Sample_ID	X_SW99	Y_SW99	Length	TREO_ppm	HREO %
T01	OST01_01	581249.9	6432653	0.85	8634	10%
T01	OST01_02	581250.6	6432653	0.54	2631	16%
T01	OST01_03	581251	6432654	0.91	2311	12%
T01	OST01_04	581252.6	6432653	0.68	3252	10%
T01	OST01_05	581253.1	6432653	0.74	844	32%
T01	OST01_06	581253.7	6432654	0.68	1021	36%
T01	OST01_07	581254.2	6432654	0.65	11384	14%
T01	OST01_08	581254.6	6432655	1.1	1721	27%
T01	OST01_09	581255.4	6432656	0.57	7801	25%
T01	OST01_10	581255.8	6432656	0.99	6577	29%
T01	OST01_11	581257	6432656	0.8	2077	26%
T01	OST01_12	581257.7	6432656	0.82	1953	29%
T02	OST02_01	581150.1	6432770	0.53	1643	13%
T02	OST02_02	581150.4	6432771	0.38	10198	30%
T02	OST02_03	581149.4	6432772	0.74	8476	37%
T02	OST02_04	581149.9	6432773	0.98	3155	30%
T02	OST02_05	581150.6	6432774	0.6	6445	22%
T02	OST02_06	581149.6	6432775	0.62	4390	60%
T02	OST02_07	581150.1	6432776	0.44	4860	31%
T02	OST02_08	581150.4	6432776	0.61	3100	33%
T02	OST02_09	581150.8	6432777	1.02	3633	32%
T02	OST02_10	581151.5	6432777	0.51	1410	30%
T02	OST02_11	581151.8	6432778	0.37	5308	24%
T02	OST02_12	581152	6432778	0.72	2140	28%
T03	OST03_01	581154.6	6432770	1.05	15420	20%
T04	OST04_01	581361.4	6432759	0.53	1719	28%
T04	OST04_02	581361.4	6432760	0.27	842	40%
T04	OST04_03	581361.5	6432760	0.97	2368	32%
T04	OST04_04	581361.8	6432761	0.62	1478	30%
T05	OSC01_01	581292.8	6432596	0.7	18576	42%
T05	OSC01_02	581292.7	6432598	0.65	5114	27%
T06	OSC02_01	580911	6433334	1	4121	26%

**Table 3: Rock assay results** (NB: TREO included Y and Sc)

Sample	X_SW99	Y_SW99	TREO_Y_Sc	HREO%	Description
OSR01	581021.2	6432929	3940	19%	magnetite-biotite lense
OSR02	580996.8	6432847	24813	24%	biotite-quartz+/-mag veins
OSR03	580997.5	6432845	4945	33%	biotite-quartz-magnetite veins
OSR04	583959.3	6426857	1045	24%	red granitoid, skarn-style alt.
OSR05	583960.1	6426858	1063	26%	red granitoid, skarn-style alt.

**Table 4: Ragnar Metals Project Tenement Details**

Ragnar Metals Sweden HREE and Lithium Project Tenement Details

Name	License ID	RAG Ownership	Area Ha	Expiry Date
Gruvhagen nr 1	2023 38	100%	1612.54	23/03/2026
Olserum North	2023 55	100%	2082.61	25/04/2026
Olserum North Nr 2	2023 118	100%	3014.02	17/08/2026
Bergom nr 2	2023 35	100%	2767.31	20/03/2026
Bergom nr 3	2023 116	100%	4773.74	17/08/2026
Hälleberget nr 1	2023 36	100%	2110.45	20/03/2026
Hälleberget nr 2	2023 58	100%	2985.79	25/10/2026
Total Area			19346.45	

Orrvik tenements -

Name	License ID	RAG Ownership	Area Ha	Expiry Date
Orrvik Nr 110	2020 93	100%	600	3/12/2026
Orrvik Nr 210	2021 23	100%	922.52	16/03/2024*
Orrvik Nr 300	2020 83	100%	450.07	5/11/2026
Orrvik Nr 400	2022 77	100%	1636.18	14/11/2025
Total Area			3608.77	

\* Subject to renewal application.

**Table 5: Ragnar Metals Western Australian Project Tenement Details**

Tenement ID	RAG Ownership	Area Ha	Expiry Date
Leeds Project			
P15/6017	Loki Exploration Pty Ltd (80%)	198	2/04/2025
P15/6018	Loki Exploration Pty Ltd (80%)	199	2/04/2025

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

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## References

<sup>1</sup> Olserum 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](https://www.sec.gov/Archives/edgar/data/1474547/000094935313000119/exh99-1_olserum.htm)

<sup>2</sup> <https://www.sgu.se/om-sgu/nyheter/2023/maj/olserum-blir-riksintresse-for-sallsynta-jordartsmetaller/>

<sup>3</sup> 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 is based on information compiled by Leo Horn of All Terrain Geology, a consultant to Ragnar Metals and a member of The Australian 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". Mr Horn consents to the inclusion in the report of the matters based on his information and documents in the form and context in which it appears.*



## APPENDIX 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
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <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 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</li> </ul>	<ul style="list-style-type: none"> <li>Channel and rock sampling by Ragnar Metals is taken on outcrop rock samples.</li> <li>Channel samples are taken by a diamond saw where 2 parallel cuts are taken approx. 5-10cm apart and samples are chiselled out at 0.37-1.1m lengths chosen by the geologist based on geology, alteration and pXRF readings.</li> <li>Channel samples produced 1.75 to 4.4 kg weight samples representative of the mineralisation in that interval</li> <li>Spot readings every 10-25cm by pXRF were utilised in order to compare and verify against the final lab assay.</li> <li>All sample types and descriptions were carefully recorded by the geologist.</li> <li>The sample procedure is considered adequate for this style of REE mineralisation and for the reporting of Exploration Results.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>No drilling reported in this announcement.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>No drilling reported in this announcement.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Geological descriptions were logged and recorded by Ragnar Metals for each rock and channel sample when collected by geologist.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• No drilling reported in this announcement.</li> <li>• No sub-sampling completed for channel and rock chip samples.</li> <li>• Channel samples are taken by a diamond saw where 2 parallel cuts are taken approx. 5-10cm apart and samples are chiselled out at 0.37-1.1m lengths chosen by the geologist based on geology, alteration and pXRF readings.</li> <li>• Channel samples produced 1.75 to 4.4 kg weight samples representative of the mineralisation in that interval</li> <li>• Field duplicates not taken for this program however laboratory duplicates were taken by ALS and assessed by Ragnar and deemed to all fall within tolerance.</li> <li>• The sample procedure is considered adequate for this style of REE mineralisation and for the reporting of Exploration Results.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• Channel and rock assays were conducted by ALS laboratories in Pitea Sweden where samples were subject to lithium borate fusion followed by ICP-MS for full suite REE and other rare metals, four-acid digest for base metals ICP-AES and whole rock package by ICP-AES.</li> <li>• Standards, blanks and duplicates were conducted internally by ALS and assessed by Ragnar and are deemed to all occur within reasonable tolerance.</li> <li>• Channel sample spot readings every 10-25cm by pXRF were utilised in order to compare and verify against the final lab assay and assessed by Ragnar and are deemed to all occur within reasonable tolerance.</li> <li>• The quality control procedure is considered adequate for this style of REE mineralisation and for the reporting of Exploration Results.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	<ul style="list-style-type: none"> <li>• These assays verify previously reported rock assay results by Ragnar but now support the potential for significant widths to mineralised zones in outcrop.</li> </ul>
	<ul style="list-style-type: none"> <li>• The use of twinned holes.</li> </ul>	<ul style="list-style-type: none"> <li>• No drilling reported in this announcement.</li> </ul>
	<ul style="list-style-type: none"> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul style="list-style-type: none"> <li>• All channel and rock sampling data is stored in an internal electronic database system.</li> </ul>
	<ul style="list-style-type: none"> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• Oxide conversions calculated for REE (see <i>Data Aggregation Methods</i> section).</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <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> </ul>	<ul style="list-style-type: none"> <li>• Location of channel and rock samples by Ragnar Metals were recorded using a handheld GPS which is considered appropriate for reconnaissance sampling.</li> </ul>
	<ul style="list-style-type: none"> <li>• Specification of the grid system used.</li> </ul>	<ul style="list-style-type: none"> <li>• SWEREF99TM</li> </ul>
	<ul style="list-style-type: none"> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• Elevation data collected from handheld GPS.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• Data spacing for reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>• Channel samples were taken 60 to 150m apart where outcrop exposures were available for sampling.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The channel sample spacing is adequate to establish the degree of continuity as a first pass reporting of Exploration Results and to give confidence to conduct future drilling.</li> <li>Channel sample compositing not applied on individual sample intervals. However, significant intercepts calculated and described in Data Aggregation Methods.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Reconnaissance channel and rock sampling by Ragnar Metals was taken where outcrops are available spaced between 60m and 150m along strike.</li> <li>The orientation of magnetite-REE mineralisation is established to be oriented northwest-southeast (Strike 310-320 degrees) with steep dip to the northeast and channel sampling was conducted directly across strike to ensure sample representivity.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Ragnar Metals ensured that sample security was maintained to ensure the integrity of sample quality.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews have been conducted for this release given the early stage of 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
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Exploration Permits Olserum North (2023:55) and Olserum North nr 2 (2023:118) are 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 &amp; 17/08/2026 respectively.</li> <li>There are no known impediments to operate in the licenses areas for early stage exploration work.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>No other assays are reported in this announcement</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>REE mineralisation style at each prospect are not well understood. However, the Geological Survey of Sweden describes mineralisation at Olserum as a hydrothermal-style iron oxide-REE mineralisation style possibly sourced from intrusive magmas.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades)</li> </ul>	<ul style="list-style-type: none"> <li>Significant intercepts were calculated using a weighted average</li> <li>Intersections are calculated at 0.2%, 0.3%, 0.5% and 1% TREO with a maximum of 2m dilution</li> <li>Channel and rock assay results are converted to</li> </ul>



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	<p>and cut-off grades are usually Material and should be stated.</p> <ul style="list-style-type: none"><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></ul>	<p>stoichiometric oxide (REO) using element-to-stoichiometric oxide conversion factors.</p> <ul style="list-style-type: none"><li>These stoichiometric conversion factors are stated in the table below.</li><li>Rare earth oxide is the industry accepted form for reporting rare earth metal assay results.</li><li>Heavy Rare Earth Oxide (HREO) % refers to total of all HREO species divided by the total rare earth oxide (TREO) expressed as a percent.</li><li>NdPr ratio refers to the % calculation of Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>6</sub>O<sub>11</sub> / REO expressed as a percent.</li><li>TREO reported in this announcement includes Y and Sc.</li></ul> <table><tr><th>Element</th><th>Conversion Factor</th><th>Oxide Form</th><th>Type</th></tr><tr><td>Ce</td><td>1.2284</td><td>CeO2</td><td>Light</td></tr><tr><td>Dy</td><td>1.1477</td><td>Dy2O3</td><td>Heavy</td></tr><tr><td>Er</td><td>1.1435</td><td>Er2O3</td><td>Heavy</td></tr><tr><td>Eu</td><td>1.1579</td><td>Eu2O3</td><td>Heavy</td></tr><tr><td>Gd</td><td>1.1526</td><td>Gd2O3</td><td>Heavy</td></tr><tr><td>Ho</td><td>1.1455</td><td>Ho2O3</td><td>Heavy</td></tr><tr><td>La</td><td>1.1728</td><td>La2O3</td><td>Light</td></tr><tr><td>Lu</td><td>1.1372</td><td>Lu2O3</td><td>Heavy</td></tr><tr><td>Nd</td><td>1.1664</td><td>Nd2O3</td><td>Light</td></tr><tr><td>Pr</td><td>1.2082</td><td>Pr6O11</td><td>Light</td></tr><tr><td>Sc</td><td>1.5338</td><td>Sc2O3</td><td></td></tr><tr><td>Sm</td><td>1.1596</td><td>Sm2O3</td><td>Light</td></tr><tr><td>Tb</td><td>1.1762</td><td>Tb4O7</td><td>Heavy</td></tr><tr><td>Tm</td><td>1.1421</td><td>Tm2O3</td><td>Heavy</td></tr><tr><td>Y</td><td>1.2699</td><td>Y2O3</td><td>Heavy</td></tr><tr><td>Yb</td><td>1.1387</td><td>Yb2O3</td><td>Heavy</td></tr></table>	Element	Conversion Factor	Oxide Form	Type	Ce	1.2284	CeO2	Light	Dy	1.1477	Dy2O3	Heavy	Er	1.1435	Er2O3	Heavy	Eu	1.1579	Eu2O3	Heavy	Gd	1.1526	Gd2O3	Heavy	Ho	1.1455	Ho2O3	Heavy	La	1.1728	La2O3	Light	Lu	1.1372	Lu2O3	Heavy	Nd	1.1664	Nd2O3	Light	Pr	1.2082	Pr6O11	Light	Sc	1.5338	Sc2O3		Sm	1.1596	Sm2O3	Light	Tb	1.1762	Tb4O7	Heavy	Tm	1.1421	Tm2O3	Heavy	Y	1.2699	Y2O3	Heavy	Yb	1.1387	Yb2O3	Heavy
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	<ul style="list-style-type: none"><li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li></ul>	<ul style="list-style-type: none"><li>No metal equivalents reported in this announcement.</li></ul>																																																																				
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"><li>These relationships are particularly important in the reporting of Exploration Results.</li><li>If the geometry of the mineralisation with respect to the 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>	<ul style="list-style-type: none"><li>Channel samples are mainly important examples of disseminated, vein and massive-style magnetite-REE mineralisation identified in the field.</li><li>The dip of mineralisation is near-vertical, so channel intercepts (conducted perpendicular to strike) reported in this announcement are likely to be &gt;90% true width.</li></ul>																																																																				
<b>Diagrams</b>	<ul style="list-style-type: none"><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</li></ul>	<ul style="list-style-type: none"><li>Appropriate maps and tables are included in the body of the Report.</li></ul>																																																																				

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	sectional views.	
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The accompanying document is a balanced report of recent rock samples assays by Ragnar Metals.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>All meaningful and material exploration data available to the Company is disclosed in the body of this announcement.</li> <li>The recent magnetic survey was completed at Olserum by Radai Limited in November 2023 across an area of 8 km by 2.5 km area at 50 m flight line spacing, for a total of 469 line kilometres. Flight lines were conducted perpendicular to the strike of REE mineralisation. The magnetic field is measured with a digital 3-component fluxgate magnetometer on the tail boom of the drone. The survey was made using unoccupied aerial vehicles (UAVs). This survey report detects Radai's UAV-based magnetic measurement system, the magnetic survey and data processing, and the results obtained by the equivalent layer modelling (ELM). The results include maps of magnetic field intensity and some of its derivatives such as vertical, horizontal and tilt gradient and reduction to magnetic pole. The data was processed by Resource Potentials who produced a series of images that were presented as part of this announcement.</li> <li>An unconstrained 3D inversion model was also interpreted and produced on magnetic data by Resource Potentials. The inversion involves producing 3D isosurfaces that best represent or fit the surface magnetic data at various specific magnetic susceptibility (SI) units such as 005, 010 and 050. These 3D inversion models can give a good indication of the distribution and depth extent of magnetic rocks.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Further work is described in the body of this announcement.</li> </ul>