22 December 2022

PRELIMINARY ASSAYS REVEAL UPPER HIGHER-GRADE ZONE AT TULLSTA INCLUDING 30m at 0.8% Ni, 0.5% Cu & 0.1% Co

HIGHLIGHTS

- Assays for Hole **22DDTS010** returned an:
    - Upper zone of **30m at 0.78% Ni, 0.46% Cu & 0.08% Co** from 167m; and
    - Lower zone of **42m at 0.23% Ni, 0.18% Cu** from 389m; including a high tenor massive sulphide zone of **2.9m at 1.14% Ni, 0.38% Cu.**
- Assays for Hole **22DDTS009** returned an:
    - Upper zone of **86m at 0.26% Ni & 0.24% Cu** from 187m; and
    - Lower zone of **46m at 0.32% Ni & 0.29% Cu** from 322m; including a high-grade massive sulphide zone of **2m at 0.94% Ni & 0.66% Cu**.
- These results are the highest grade to date in the upper zone which strongly supports the depositional model that will assist discovery efforts focused on the basal massive sulphide zone.
- Further assays are still pending for 22DDTS012, which intersected 137m containing 8% visual sulphide estimates and various massive and semi-massive sulphide intervals.
- A 3D model will be completed of the final assays together with downhole EM and IP data scheduled for completion in January 2023.
- Work is also underway to re-evaluate the regional VTEM in light of recent geophysical developments at Granmuren to identify further targets across the highly prospective package.

Figure 1: *High tenor blebby, matrix and vein sulphide in the upper zone of hole 22DDTS010 showing assay results*

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Executive Director Eddie King commented:

"*The Project continues to deliver excellent results and confirms our belief that the best is yet to come at depth. We also firmly believe this is a highly prospective regional ground holding, and with ongoing drilling, we are confident there will be further discoveries.*"

Program Overview

Ragnar Metals Limited ("Ragnar" or "the Company", ASX: RAG) continues to periodically receive positive assay results from the recent 2022 diamond drill program, led by Swedish drilling contractor Allroc AB to further test the Granmuren nickel-copper discovery. Granmuren is located within the Company's 100%-owned Tullsta Nickel Project in Sweden, 110km NW of Stockholm ("Tullsta" or "the Project").

Assay Results

Complete assay results have now been received from **22DDTS009** and **22DDTS010** which were both collared from the northeast and angled back toward the southwest aimed to pierce the highly prospective northern contact of the gabbro host intrusion (Figure 2).

Assay results have been returned from **22DDTS010** and successfully returned multiple intervals of variably disseminated, blebby, matric, vein, semi-massive and massive nickel-copper-cobalt sulphide within the *upper zone* from 153m to 189m and a *lower zone* from 338m to 444.9m. The highlight assay results are clearly from the *upper zone* where high tenor variable sulphide of robust width returned **30m at 0.78% Ni, 0.46% Cu & 0.1% Co** from 167m. These are the highest-grade assays within the *upper zone* to date on the project and are considered highly significant. Assays for **22DDTS010** also returned a thick lower zone of moderate tenor disseminated nickel-copper-cobalt sulphide of **42m at 0.23% Ni, 0.18% Cu & 0.08% Co** from 389m, including zones of high tenor massive sulphide **2.9m at 1.14% Ni, 0.38% Cu & 0.1% Co.** Selected assay results, see Table 1**.**

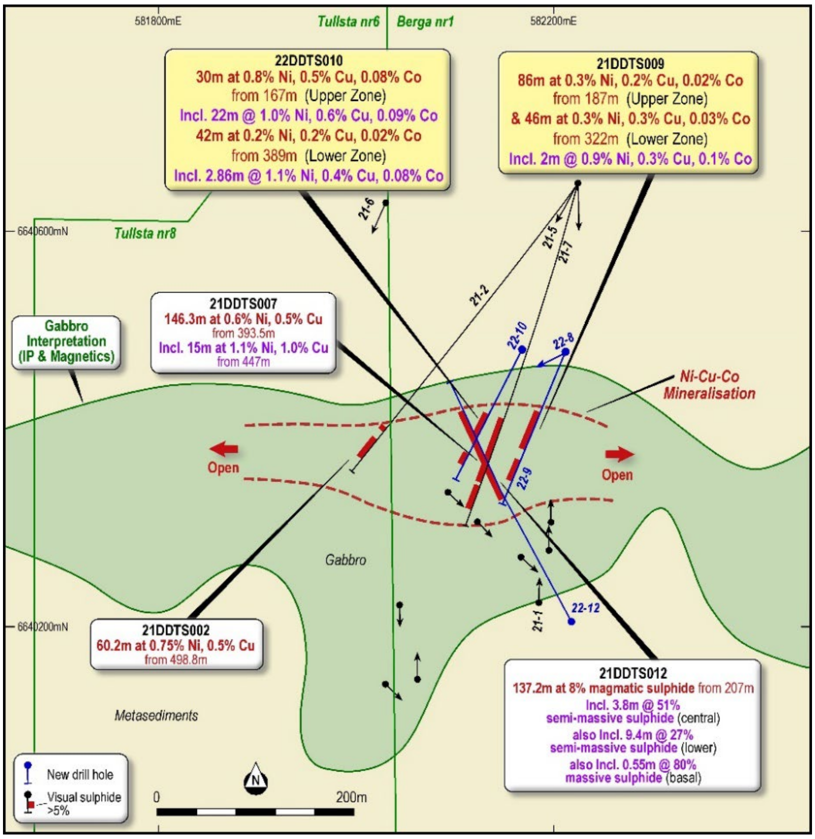

***Figure 2:** Simplified interpreted bedrock geology map of the host gabbro intrusion at Granmuren and highlighted drilling intersections.*

Assay results were also returned from **22DDTS009** where a significant interval of moderate tenor disseminated nickel-copper-cobalt sulphide within the *upper zone* returned **86m at 0.26% Ni, 0.24% Cu & 0.02% Co** from 187m as well as a similar *lower zone* that returned **46m at 0.32% Ni, 0.29% Cu & 0.03% Co** including a higher-grade massive sulphide interval of **2.0m at 0.94% Ni, 0.66% Cu & 0.1% Co**. For selected assay results, please refer to Table 1.

Hole	From	To	Interval	Ni_pct	Cu_pct	Co_pct	Cutoff
22DDTS010	153	162	9	0.26	0.23	0.03	0.2% Ni
	167	**197**	**30**	**0.78**	**0.46**	**0.08**	**0.2% Ni**
including	**167**	**189**	**22**	**0.96**	**0.34**	**0.09**	**0.5% Ni**
	338	341	3	0.72	0.44	0.07	0.2% Ni
	389	**431**	**42**	**0.23**	**0.18**	**0.02**	**0.1% Ni**
including	338	341	3	0.72	0.44	0.07	0.2% Ni
also including	389	394	5	0.24	0.24	0.03	0.2% Ni
also including	400	405	5	0.24	0.16	0.02	0.2% Ni
also including	412	417	5	0.50	0.34	0.03	0.2% Ni
including	**415**	**416**	**1**	**1.32**	**0.59**	**0.06**	**0.5% Ni**
	423	432.75	9.75	0.33	0.23	0.03	0.2% Ni
	439	444.86	5.86	0.64	0.43	0.05	0.2% Ni
including	**442**	**444.86**	**2.86**	**1.14**	**0.38**	**0.08**	**0.5% Ni**
22DDTS009	**187**	**273**	**86**	**0.26**	**0.24**	**0.02**	**0.1%**
including	240	242	2	0.55	0.55	0.05	0.5%
also including	264	268	4	0.50	0.35	0.05	0.5%
	322	**368**	**46**	**0.32**	**0.29**	**0.03**	**0.2%**
including	**364**	**366**	**2**	**0.94**	**0.66**	**0.07**	**0.5%**

***Table 1**: Selected highlight assay intersections for 22DDTS010 & 22DDTS009 at 0.1%, 0.2% and 0.5% nickel cut-off (for collar location information refer Table 2 and previous RAG announcement on 30 September 2022).*

Technical Discussion & Ongoing Work

These assay results in the upper zone are the highest grade to date which strongly supports Ragnar's depositional model that will ultimately assist discovery efforts focused on the deeper basal massive sulphide zone (Figure 3). The new assay results will be incorporated with the new downhole IP and EM data that is scheduled for early January 2023 and will produce a robust 3D model to accurately define deeper drill targets that are now Ragnar's highest priority focus. Ragnar is also awaiting assay results for **22DDTS012** intersected 137m containing 8% visual sulphide estimates along with various intervals of massive and semi-massive sulphides.

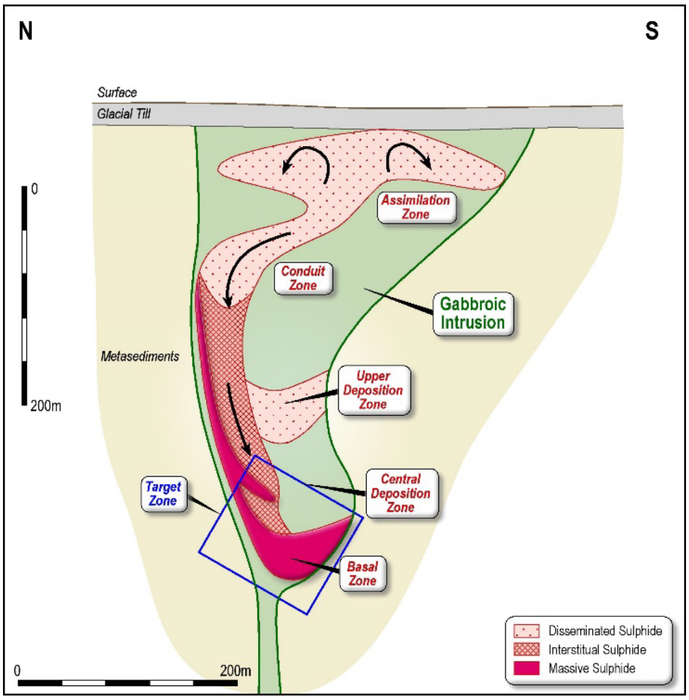

***Figure 3:** Schematic section showing the interpreted ore forming model within the Granmuren gabbro host intrusion. The Central and Basal zones are the most prospective for massive sulphide deposition and are the focus for future drill programs.*

In addition to the focus on Granmuren, Ragnar is also focussing on progressing the regional targets throughout their Swedish tenure for highly prospective discoveries of nickel-copper-cobalt deposits. As outlined in the RAG announcement dated 17 May 2022, the 2011 heliborne Versatile Domain Electromagnetic (VTEM) survey was responsible for detecting the TU1 anomaly that has since become the Granmuren discovery. Several other regional targets have been defined, including TU2 and TU3 anomalies located 2.5 km northeast of Granmuren and remaining untested, which warrant further work (Figure 4). Regional field work commenced in June 2022, identifying the Koppar Gruvan prospect, where strong copper sulphide-altered gabbros were identified at surface. This work is associated with historic mine workings (Figure 5). All of this work strongly supports the prospectivity of the tenure, so further regional work is warranted. The VTEM data is currently being re-processed and interpreted to identify further anomalies with similar geophysical characteristics to Granmuren. Extensive geophysics work has been completed on Granmuren over the last year, and these drilling campaigns will greatly assist additional regional geophysical targeting work.

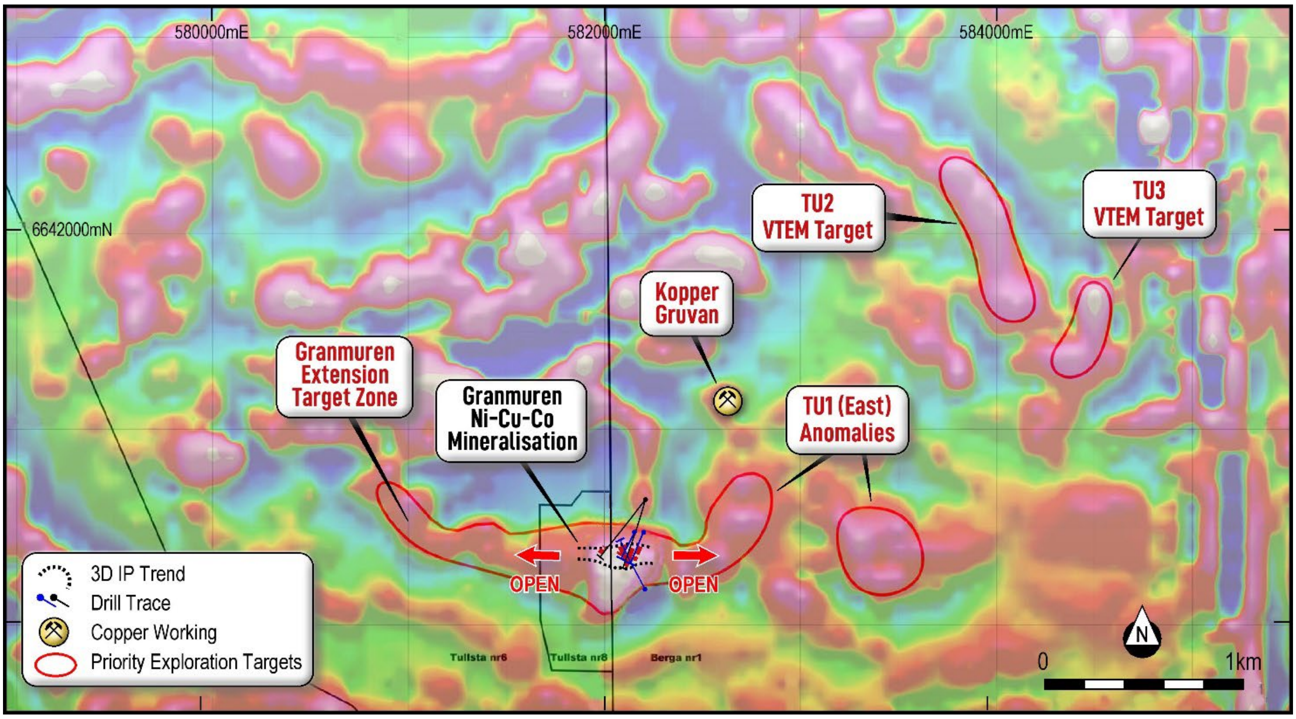

Figure 4: *Plan view of the Ragnar tenure of 1st Vertical Derivative VTEM magnetic image showing surface projection of Ni-Cu-Co mineralisation interested to date at Granmuren as well as other regional and/or VTEM targets.*

Figure 5*: Photos of chalcopyrite-pyrrhotite altered gabbro from the Koppar Graven prospect located 1 km northeast of Granmuren (location: 582707E, 6641198N).*

Table 2: *Tullsta Project - Collar Details*

Hole ID	Type	Easting	Northing	RL	Coords	Azi	Dip	Depth
22DDTS009	DD	582220	6640480	78	SWEREF99	200.60	-69.30	460.60m
22DDTS010	DD	582165	6640477	79	SWEREF99	205.37	-70.00	457.35m

Table 3: *Ragnar Metals Tullsta Project Tenement Details.*

Name	License ID	RAG Ownership	Area Ha	Valid From	Valid To
Berga nr 1	2018 48	100%	2181.52	28/03/2018	28/03/2025
Tullsta nr 6	2017 158	100%	2695.03	06/11/2017	06/11/2024
Tullsta nr 7	2019 5	100%	4452.74	25/01/2019	25/01/2023
Tullsta nr 8	2020 45	100%	31.41	07/05/2020	07/05/2024
Tullsta nr 9	2021 75	100%	1599	27/10/2021	27/10/2024
Total Area			**10959.70**		

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

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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 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 Resource and Ore Reserves".
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.	• NQ sized Diamond drill core was collected in wooden core trays and geological sampling intervals were selected then cut in half using a core saw. • Half core was collected for assay testing.
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	• Core is cut and sampled to ensure the sample is representative and no bias is introduced. • Repeat check assays were completed at an independent laboratory.
	• Aspects of the determination of mineralisation that are material to the Public Report.	• Mineralisation was determined based on geological logging and by visual sulphide estimates mineralised intervals. Samples were selected for assay analysis and dispatched to an accredited laboratory for multi-element analysis.
	• 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	• Diamond Core drilling was used to obtain 3m length samples from the barrel which are then marked in one-meter intervals based on the drillers core block measurement. • Samples were selected and cut based on geological observation of sulphide mineralisation boundaries. • Collected samples weigh a nominal 2-3 kg (depending on sample length). • The selected core trays were dispatched to MSALabs in Sweden, an accredited laboratory, where the selected intervals were cut, sampled and prepped.
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).	• Drilling was undertaken by Allroc AB using NQ2 sized drill core. • Hole was collared with mud rotary from surface (~4m) and cored with NQ2 sized cored to EOH.
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.	• Core recovery was recorded by the drill crew and verified by the geologist. • RQD measurements will be digitally recorded to ensure recovery details are captured. • Sample recovery in all holes was high with negligible loss of recovery observed. • Diamond core drilling is the highest standard and no relationship has been established between sample recovery and reported grade as the core is in very good condition.

Criteria	JORC Code explanation	Commentary
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.	• Detailed industry standard of collecting core in wooden core trays, marking meter intervals and logging will be undertaken • Core trays were photographed prior to logging. • Drill hole logs are recorded in Excel spread sheets and validated in Micromine and Surpac Software. • All core trays were photographed and validated against the drill logs. • The entire length of all holes is logged.
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • 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.	• Core is cut in half using a core saw, with half being used for assay analysis and the other half remaining in the core boxes. • Sample preparation technique is appropriate for diamond core sampling. • Core was consistently cut on the same side as the orientation line to reduce sampling bias. • Check samples from 21DDTS002 were sent to an independent laboratory ALS in Sweden for QAQC duplicate checks. • Sample lengths and volume sampled are appropriate for coarse sulphide mineralisation.
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 geophysical results are being reported at this stage. • QAQC procedures included Certified Reference Material source from Accredited Australian Standards supplier. • These were inserted into the sample stream. • Duplicate samples were completed on the homogenised samples pulps.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel.	• Intersections have been verified by GeoVista in Sweden and Geolithic in Australia.
	• The use of twinned holes.	• No twinned holes have been completed
	• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• The data was collected and logged using Excel spreadsheets and validated using Micromine Software. The data is loaded into a Dropbox database for sharing between consultants
	• Discuss any adjustment to assay data.	• No adjustments have been made to the assay data other than length weighted averaging.
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.	• The holes were pegged by GeoVista consultants using a handheld GPS ± 3m. The rig was setup over the nominated hole position and final RTK-GPS pickup occurred at the completion of the hole.
	• Specification of the grid system used.	• SWEREF99TM
	• Quality and adequacy of topographic control.	• Collar RLs are determine by Swedish state 1m^2 LIDAR surface topography data from Lantmäteriet to within 0.5m accuracy.
	• Data spacing for reporting of Exploration	• Refer to Maps and Sections in report body.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	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.	• No Mineral Resource is being stated.
	• Whether sample compositing has been applied	• No post sample compositing has been applied and is presented as length-weighted averages.
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.	• Drilling is aimed for the azimuth to be close to right angles to the target zones. Dip angles are not always at right angle due to collar positioning and distance from the target. • Best orientation is still being determined during this early stage of the drilling works.
Sample security	• The measures taken to ensure sample security.	• Samples are in the possession of GeoVista personnel from field collection to laboratory submission.
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 Berga nr1 (2018:48:00) and Tullsta nr8 (2020:45) 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 28/03/2025 & 7/05/2024 respectively. • All regulatory and heritage approvals have been met and work permits approved. There are no known impediments to operate in the area.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	Granmuren is Ragnar's greenfield nickel, copper, cobalt discovery in the Bergslagen district of Sweden, which has a very long and significant mining history dating back more than 1,000 years and contains over 6,000 known mineral deposits and prospects. Bergslagen was more recently recognized as a prospective region resulting in interest from mining and exploration companies over the last 10 years. The Tullsta Project contains the Granmuren Nickel Deposit which was discovered in 2012 by drilling of a VTEM survey anomaly. In 2018, Geolithic and GeoVista commenced re-evaluation and field work on the Granmuren mineralisation, recognising the sulphides had been remobilised from a distal source. Ragnar commissioned GeoVista to complete an IP-Resistivity survey over the area in late 2019, and 3D modelling of the data defined a large NW plunging anomaly below the Granmuren mineralisation. The geological and geophysical model was similar to that of the Sakatti Ni-Cu-PGE deposit to the NE across the border in Finland, which was discovered in 2009. The 3D IP model

Criteria	JORC Code explanation	Commentary
		defined a continuous body that extends from below the level of historical drilling and open to the northwest. Magnetic and gravity modelling also indicated a western to north-western plunging body trending through the Tullsta Nr8 permit area, which abuts the Berga Nr1 permit.
Geology	• Deposit type, geological setting and style of mineralisation.	Scandinavia and the adjoining Karelia Province in north-west Russia is one of the major nickel-copper provinces of the world. It includes the giant Pechenga deposit in Karelia, as well as recent discoveries at the Sakatti and Kevitsa Projects, both in Finland. Granmuren is an extension of the Svecofennian province which has played a long significant part of Finland's smelting and refining success. Scandinavian operations are both open pit and underground with typical grades of 0.25% to 1.0% nickel. Cobalt is locally present and has only been mined as an economic by-product from nickel-copper-rich sulphide deposits in the Bergslagen region. Nickel-copper sulphides hosted have been mined historically in the Bergslagen region from gabbroic rocks since the middle of the 18th Century. The small but significant Slättberg and Kuså deposits in the northern part of the Bergslagen region were important producers in the context of their time. Other deposits of this type are the Frustuna deposit in southern Bergslagen as well as the Ekedal and Gaddebo deposits in the central part of the region. Initially exploited for Cu alone, their Ni component was obtained as a smelter by-product in the 1850-1880 period, before a drop in the Ni price caused by production from New Caledonia (where export of Ni began in 1875) effectively made them uneconomic. World production of Ni metal at this time was on the order of 1000 tpa. The Bergslagen Ni-Cu deposits received renewed interest during the two World Wars, owing to the strategic value of Ni and Cu in arms and ammunition production. Total production is estimated to be approximately 700-800 tonnes of Ni metal, which to put into context, amounts to approximately one week's production at BHPs Mount Keith Ni mine in Western Australia. In contrast to other base-metal deposit styles, sulphidic Ni-Cu had not been a focus for modern exploration companies in the region, possibly because the known deposits have been small in comparison with other Ni camps around the World. The blind, greenfields discovery of sulphidic Ni-Cu sulphides at Granmuren by Ragnar in 2012 stands a modern milestone in Bergslagen exploration history. The discovery validates the modern strategy of applying 21st century technologies such as electrical geophysics to historic mining belts and warrants further evaluation and exploration.
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.	• All reported drill results have been length-weighted averaged at a nominal 2% visual sulphide cutoff for the upper and lower sulphide boundaries. • No maximum cutoff has been applied.

Criteria	JORC Code explanation	Commentary
	• 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.	• Internal dilution of <2% visual sulphide is included within the overall mineralised sulphide zone for continuity.
	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	• No metal equivalents are 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').	• The two combined models from the geophysical survey form a continuous body that extends from surface to below the boreholes and open to the west and to the north. Magnetic and gravity modelling also indicates a western to north-westerly plunging body which is supported by the results of this recent geophysical survey. Mineralisation is interpreted to follow this trend. • Sulphide mineralisation contacts appear to be perpendicular to the core however, true width cannot be determined at this stage as the dip of the mineralised contact is yet to be accurately determined.
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• Appropriate maps, sections and tables are included in the body of the Report.
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.	• All completed drillholes within this announcement are detailed in the body of this report.
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.	• Everything meaningful and material is disclosed in the body of the report. • Geological observations are included in the report. • No bulk samples, metallurgical, bulk density, groundwater, geotechnical and/or rock characteristics test were carried out. • There are no known potentially deleterious or contaminating substances.
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.	• Complete Stage 1 drilling and commence Stage 2 drilling • Undertake geophysical survey of drill holes using DHEM & DHIP-R methods • Await geophysical modelling results being processed by GeoVista. • Use the DHEM & DHIP-R models to re-interpret the 3-dimensional geological model in order to drive the next round of exploration targeting.