31 October 2022

FURTHER MASSIVE & SEMI-MASSIVE SULPHIDES INTERSECTED AT TULLSTA

HIGHLIGHTS

- Hole 22DDTS012 has intersected 137m of visual nickel sulphides within the Granmuren gabbroic intrusion including massive and semi-massive sulphide zones
- Visual sulphide estimates include the mineralised upper, central, lower zones and basal zones within the Granmuren magmatic gabbroic intrusion including (See Table 1 for details):
    - **Hole 22DDTS012**
        - 137.25m containing 8% visual sulphides estimates (Entire Zone-Appendix 1)
            - 98.2m containing 4% blebby-interstitial sulphides estimates (Upper Zone)
            - 3.8m containing 51% massive & semi-massive sulphides (Central Zone-Fig 3)
                - **Including 0.35m containing 85% massive sulphides** (Fig 1)
            - 34.7m containing 13% interstitial, semi-massive & blebby sulphides (Lower Zone-Fig 2)
            - **0.55m containing 80% massive sulphide zones** (Basal Zone-Fig 4)
- Hole 22DDTS012 was drilled perpendicular to hole 21DDTS007 to test the 3-dimensional nature of the potentially significant magmatic sulphide system (Figure 5 & 6)
- Downhole geophysics comprising (DHIP-R) surveying has been completed and (DHEM) will be undertaken at the completion of the drilling program
- GeoVista are currently processing the DHIP-R data in Sweden
- Phase 2 drilling has commenced that will test the eastern extension and northern lobe targets
- Core is being prepared for independent laboratory analysis with results expected in November

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Executive Director Eddie King commented,

"*We are pleased to report that Phase 1 drilling has accomplished its goal of intersecting sulphides, including massive sulphides, surrounding the highly successful 21DDTS007 with logging confirming visual sulphides over substantial widths in adjacent holes.*
Phase 1 drilling demonstrates the potential scale of the Granmuren system, and we are excited the intersection of sulphides confirms the geophysical modelling to generate drill targets is working."

"Based on the impressive visual sulphides and the technical information gathered from this round of drilling, we have a better understanding of the geological model and the ore forming process of the Granmuren mineralisation. The Central and Basal zones have been identified as the most favourable target zones for the deposition of massive and semi-massive sulphide, and we await the assay results as well as the recent geophysical modelling to begin targeting for our next round of drilling. Targeting will be based around our revamped geological model with the goal of unlocking the large potential of the Granmuren intrusion as well as the additional target zones within Ragnar's vast tenement package."

Program Overview

Ragnar Metals Limited ("**Ragnar**" or "**the Company**", **ASX: RAG**) is continuing the 3,000m drilling program, led by Swedish drilling company 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").

Figure 1: Close up of the pyrrhotite and pentlandite bearing Massive and Semi-massive (very coarse Interstitial) sulphides in the core of hole 22DDTS012 (405.8m-408.7m shown)

Table 1: Visual Sulphide Estimates (Note: pentlandite cannot be visually estimated however elevated Ni XRF point readings suggest that it is present in similar proportions to previous drill holes).

		Mapped Reported Visual Estimates						
Hole ID		From (m)	To (m)	Width (m)	Zone	Sulphide type	Sulphide Minerals	Visual Sulphide Estimation (%)
22DDTS012	***Total Interval***	**307.00**	**444.25**	**137.25**	**Entire**	**Magmatic Sulphides**	**Po, Pe, Cpy**	**8%**
	Comprising	307.00	405.20	98.20	Upper	Blebby-Interstitial	Po, Cpy ± Pe	4%
		405.20	409.00	3.80	Central	Massive, Semi-massive, Interstitial	Po, Pe, Cpy	51%
	Including	***406.35***	***406.70***	***0.35***	***Central***	***Massive***	***Pe, Po, Cpy***	***85%***
		409.00	418.40	9.40	Lower	Interstitial-Semi-massive	Po, Pe, Cpy	27%
		418.40	443.7	25.30	Lower	Interstitial, disseminated	Po, Cpy ± Pe	7%
		443.70	**444.25**	**0.55**	**Basal**	**Massive**	**Po, Pe, Cpy**	**80%**

In relation to the disclosure of visual mineralisation, the Company cautions that visual estimates of sulphide abundance should never be considered a proxy or substitute for laboratory analysis. Laboratory assay results are required to determine the widths and grade of mineralisation. The Company will update the market when laboratory analytical results become available.

Technical Discussion

Stage 1 drilling has progressed, successfully intersecting broad widths of magmatic sulphide mineralisation in hole 22DDTS012 which was drilled back towards the northern contact of the Granmuren gabbroic intrusion (Figure 5). This drill hole has assisted greatly in understanding and developing the geological model for the Granmuren Intrusion. Most importantly, this leads to a greater understanding on the controls of sulphide development and its deposition.

Hole 22DDTS012 successfully tested above and below the highly mineralised drill hole 21DDTS007 that intersected **146.3m at 0.6% Ni and 0.5% Cu**.[1] Recently completed drillhole 22DDTS012 intersected 137m of sulphide bearing gabbros and has continued to confirm the substantial volume of sulphide mineralisation intersected throughout the large-scale gabbroic intrusion (Figure 6).

Figure 2: Chalcopyrite (Cu) rich vein at the top of the Lower Zone (409.4-409.6.m)

The sulphide mineralisation continues to display typical disseminated, interstitial/matrix, semi-massive, massive and vein style sulphide mineralisation over broad zones, with the Central and Basal zones producing the higher tenor massive and semi-massive sulphide accumulations (Figure 1 & Figure 3). Handheld pXRF readings by the technical team has confirmed the presence of Ni-Cu-Co mineralisation within these zones which have been sampled and sent to the laboratory for assay analysis.

Ragnar's geologists interpret that the sulphides formed towards the top of the intrusion through sulphide assimilation and initially forming the original upper mineralisation first discovered in 2012-2013 (Figure 7). As the Ni-Cu-Co bearing sulphides began to form on mass, the dense weight of the sulphide metal accumulations resulted in a collapse of the sulphide body. The hot sulphide metal slurry began draining sub vertically down the northern margin of the slowly cooling intrusion resulting in the development of the crowded crystal-sulphide mush textures shown by the interstitial and semi-massive textures. Massive sulphide zones formed along the basal contacts and internally within choked conduits inside the cooling gabbroic intrusion, as well as injected into fractures within the footwall meta-sediments. The Central and Basal zones are the most prospective for massive and semi-massive sulphide deposition and will be the focus for future drilling programs (Figure 7).

GeoVista have recently finished the next phase of DHIP-R surveying on the completed drill holes along the northern contact zone and will undertake further DHIP-R and DHEM surveying of the untested holes at the completion of the drilling program. GeoVista will combine the results of the new geophysical survey data with the existing geophysical model which will provide a more comprehensive model. Once the controls around the deposition of the sulphide system are fully analysed, this development will assist Ragnar's geologists in confirming the newly proposed geological model which will allow for accurate targeting during future drilling.

[1] ASX:RAG 12/04/22 "Assays Confirm Large Scale Potential of Granmuren Ni-Cu-Co Discovery"

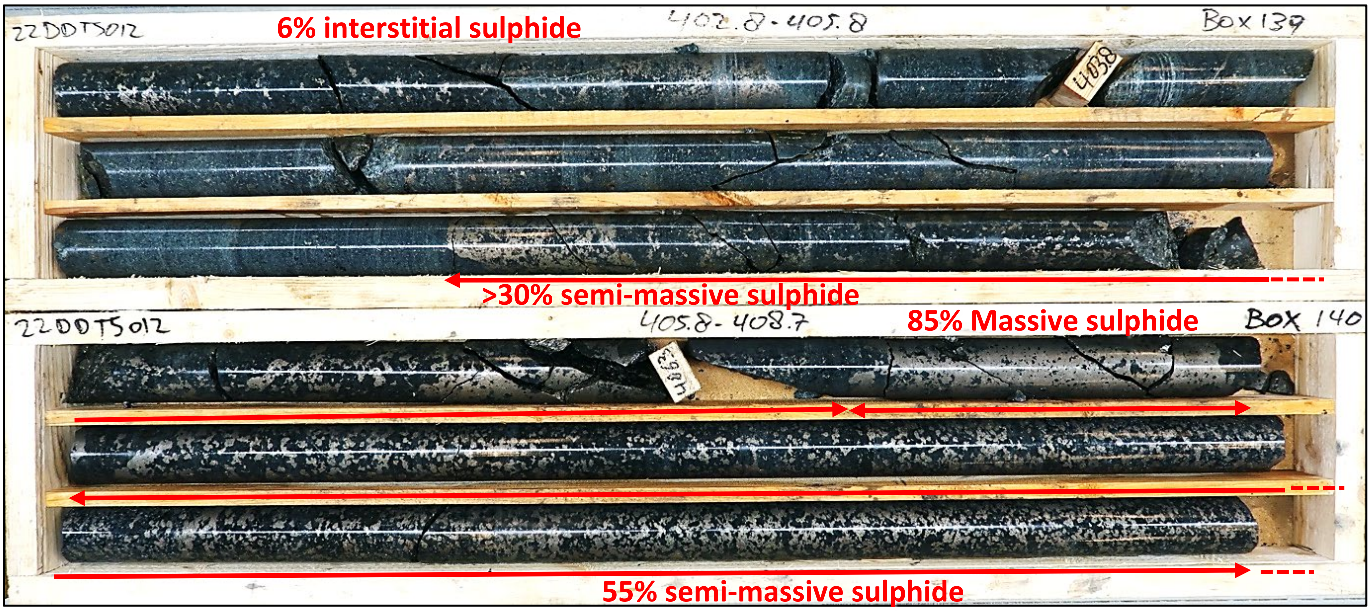


Figure 3: Massive, Semi-massive and coarse Interstitial sulphides in the Central Zone of hole 22DDTS012 (402.8m-408.7m shown)

Figure 4: Basal Massive Sulphide zone comprising pyrrhotite, chalcopyrite and pentlandite (443.7m-444.25m highlighted)

Table 2: Tullsta Project-Collar Details

Hole ID	Type	Easting	Northing	RL	Coords	Azi	Dip	Depth
22DDTS008	DD	582220	6640480	78	SWEREF99	225.13	-69.40	400.80m
22DDTS009	DD	582220	6640480	78	SWEREF99	200.60	-69.30	460.60m
22DDTS010	DD	582165	6640477	79	SWEREF99	205.37	-70.00	457.35m
22DDTS011	DD	582234	6640193	84	SWEREF99	330.84	-61.00	116m: Hole caved in
22DDTS012	DD	582241	6640197	84	SWEREF99	323.73	-59.71	482.00m

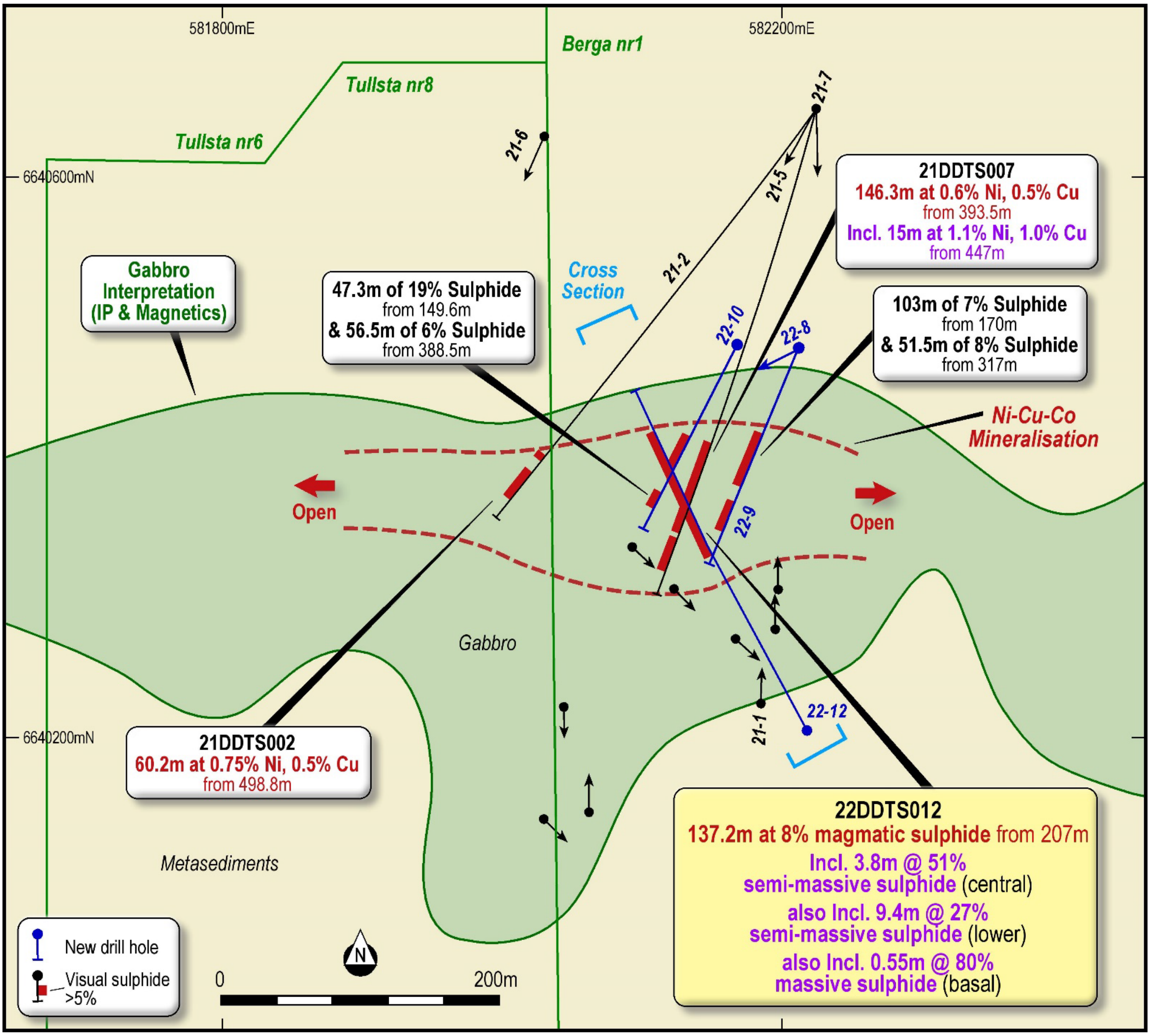


Figure 5: Plan view with drilling with local tenure and interpreted geology from drilling and aeromagnetics.

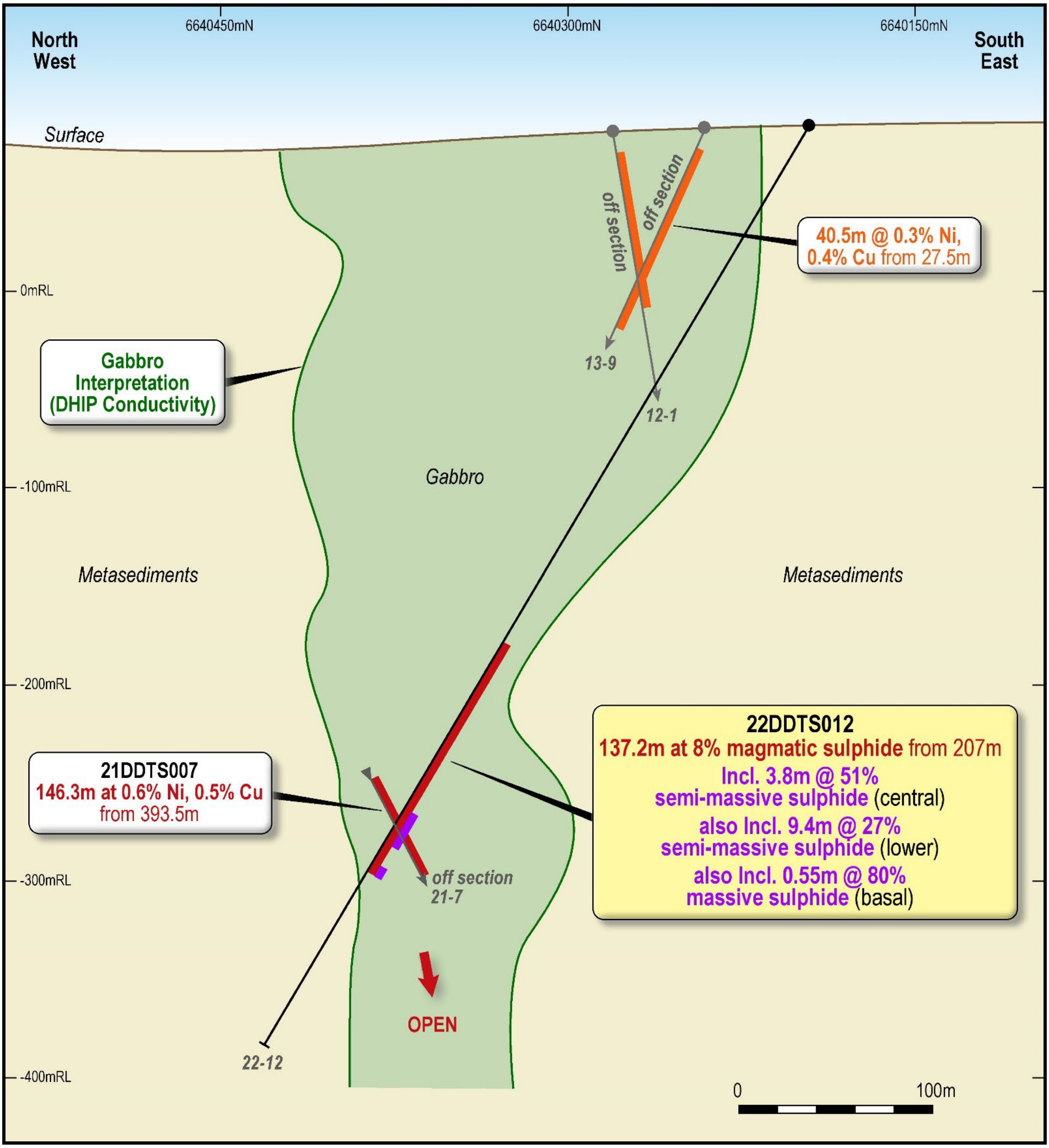


Figure 6: Cross Section through 22DDTS012 showing position of magmatic sulphide mineralisation with the gabbroic intrusion.

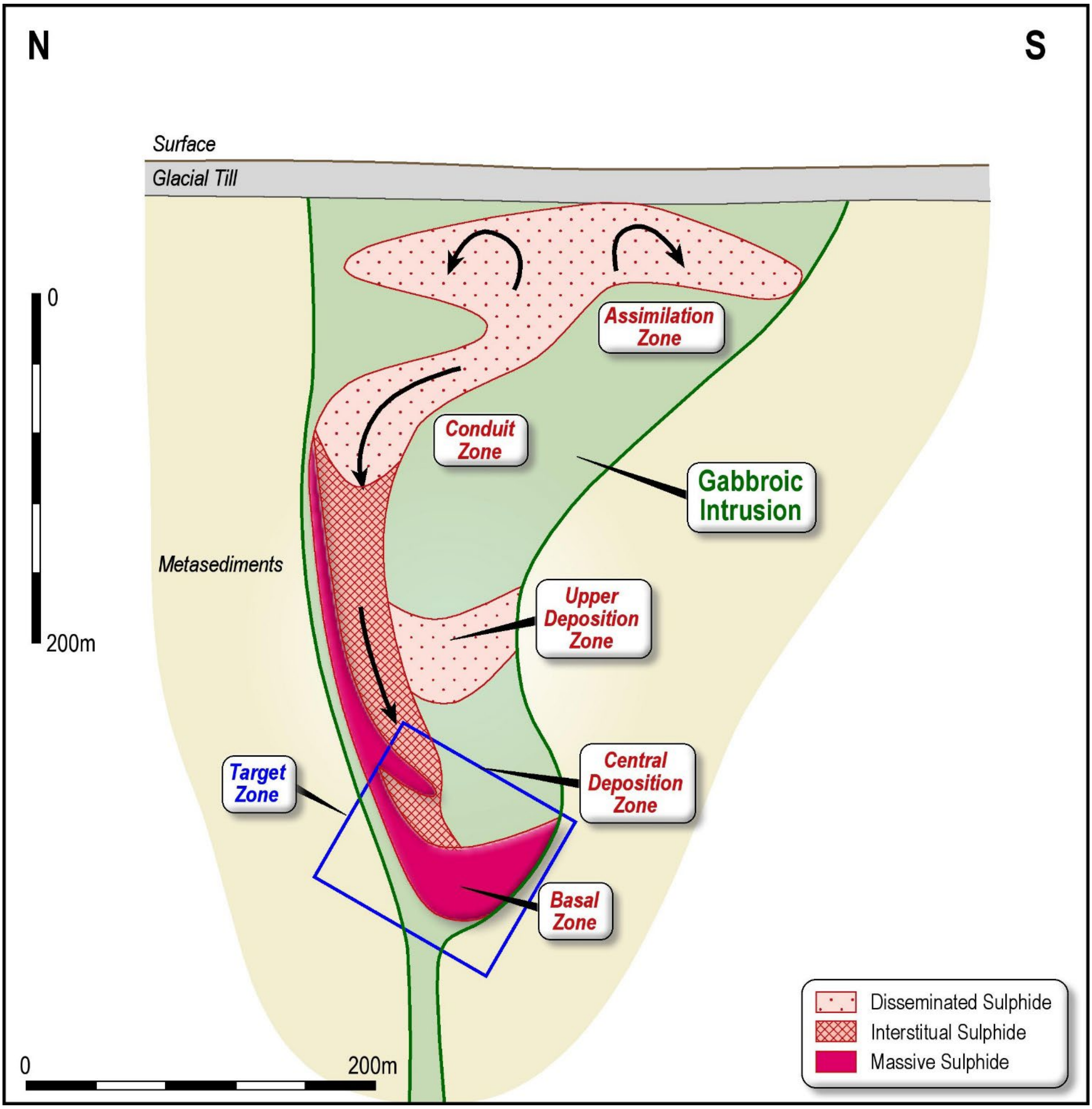


Figure 7: Schematic section showing the interpreted ore forming model within the Granmuren gabbroic intrusion. The Central and Basal zones are the most prospective for massive and semi-massive sulphide deposition and will be the focus for future drilling programs.

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	28/03/2026
Tullsta nr 6	2017 158	100%	2695.03	06/11/2017	06/11/2025
Tullsta nr 7	2019 5	100%	4452.74	25/01/2019	25/01/2024
Tullsta nr 8	2020 45	100%	31.41	07/05/2020	07/05/2025
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 for this announcement to be released.

For further enquiries contact:

Steve Formica
Chairman
RAGNAR METALS LIMITED
Tel: +61 418 920 474
Email: steve@ragnarmetals.com.au

Competent Person Statement

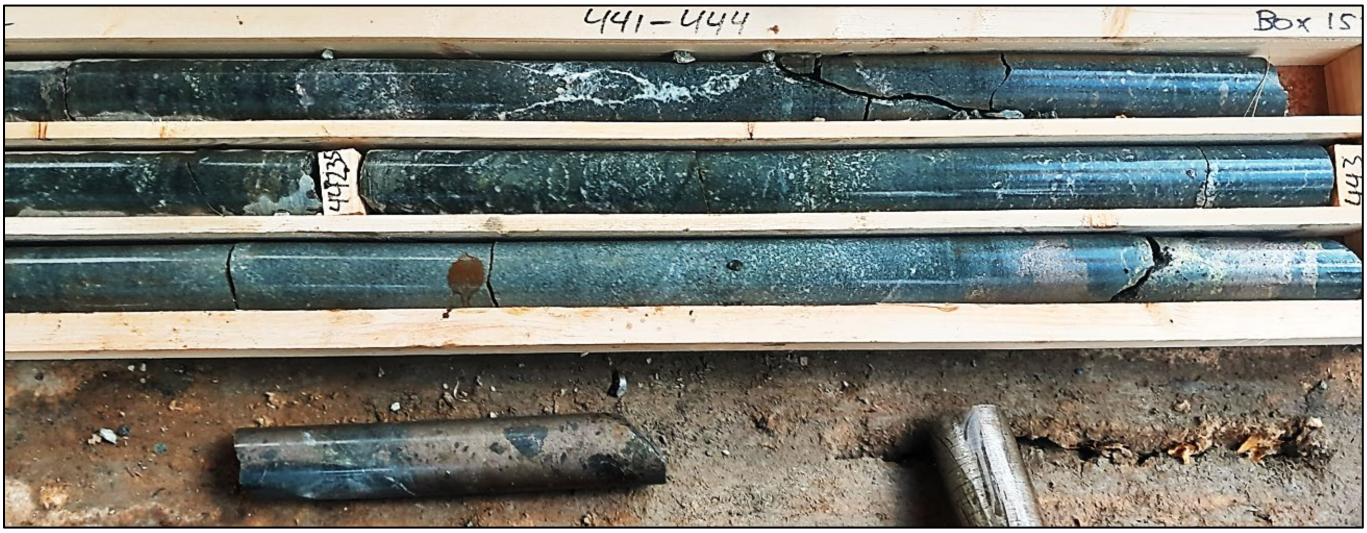
The information in this announcement relating to Exploration Results is based on information compiled by Neil Hutchison of Geolithic Geological Services, a consultant to Ragnar Metals and a member of The Australasian Institute Geoscientists. Mr Hutchison has sufficient experience relevant to the style 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 Hutchison 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

22DDTS012 Core Photos (Depths are marked on the top of the core boxes)

Basal sulphide zone in 22DDTS012



RAGNAR METALS LTD.

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 metre 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 metre 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.	• Intersection 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 $\pm$ 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 composting 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 28/03/2026 & 7/05/2025 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 DHIP-R modelling • Undertake additional geophysical survey of drill holes using DHEM & DHIP-R methods at the completion of drilling • Use the geological data and the geophysical models to confirm the geological interpretation in order to drive the next round of exploration targeting.